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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/531,718

04/24/2006

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UEDA5

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EXAMINER

PERRY, ANTHONY T

ART UNIT

PAPER NUMBER

2879

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	Application No. 10/531,718	Applicant(s) UEDA ET AL.	
	Examiner Anthony T. Perry	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/18/05</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 7-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Morinori et al. (JP 64-025953).

Regarding claims 1-2, Morinori discloses a material for an aperture grill for a color picture tube, characterized by being composed of a low-carbon alloy steel containing 0.60% by weight or more of Mn, 0.051% by weight or more of Si, 0.05% by weight or less of C, and 0.03% by weight or less of Al, the balance of its composition being Fe and unavoidable impurities (for example, see Abstract).

Regarding claims 3-4, Morinori teaches the grill being heat treated for shape correction (blackened) at a temperature not causing re-crystallization (for example, see the Abstract).

Regarding claims 7 and 13, Morinori teaches the material containing 0.10% by weight or less of P (for example, see the Abstract).

Regarding claims 8 and 14, Morinori teaches the material containing 0.0040 to 0.030% by weight of N (for example, see Abstract).

Regarding claims 9 and 15, teaches the material containing more than 0.001% by weight of Cu (for example, see Abstract).

Regarding claims 10 and 16, Morinori teaches the material containing 0.10% by weight or less of S (for example, see Abstract).

Regarding claims 11 and 17, Morinori discloses an aperture grill for a color picture tube made from a material for an aperture grill as set forth in claims 1 and 2 (for example, see Abstract).

Regarding claims 12 and 18, Morinori discloses a color picture tube including an aperture grill as set forth in claims 11 and 17 (for example, see Abstract).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-6 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morinori et al. (JP 64-025953) as applied to claims 1-2, above, and further in view of Thoms (US 5,382,870).

Regarding claims 5-6, Morinori teaches the grill being heat treated for shape correction (blackened) at a temperature not causing re-crystallization (for example, see the Abstract), but does not specifically teach the grill being subject to a surface roughening treatment producing a surface roughness Ra from 0.1 to 0.8 microns.

However, Thoms teaches providing a surface roughness between 0.1 and 0.8 microns in order to prevent shadow masks from adhering to each other during an annealing step. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the grills with a surface roughness so as to prevent damage to them during their manufacture (for example, see col. 3, lines 18-20).

Regarding claim 19, Morinori teaches the material containing 0.10% by weight or less of P (for example, see Abstract).

Regarding claims 20, Morinori teaches the material containing 0.0040 to 0.030% by weight of N (for example, see Abstract).

#### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Anthony Perry* whose telephone number is (571) 272-2459. The examiner can normally be reached between the hours of 9:00AM to 5:30PM Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. **The fax phone number for this Group is (571) 273-8300.**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Anthony Perry/

Anthony Perry  
Patent Examiner  
Art Unit 2879  
January 7, 2008

  
TOANTON  
PRIMARY PATENT EXAMINER